



AP 382  
JW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of:

KURT SCHUNKE et al.

Attorney Docket No.: Schunke

Appl. No.: 09/727,109

Group Art Unit: 3682

Filed: November 30, 2000

Examiner: McAnulty, Timothy P.

For: ADJUSTING DEVICE

Tech. Center 3600

**APPELLANTS' BRIEF**

Mail Stop: Appeal Brief – Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The appellants respectfully submit the following brief in the appeal of the subject application. The Notice of Appeal was filed on September 30, 2004, following a final rejection mailed April 30, 2004.

**I. Real Parties in Interest:**

Dewert Antriebs — Und SystemTechnik GmbH and Co. KG and Megdal Associates, LLC are the real parties in interest by way of assignment from the applicants.

**CERTIFICATE OF MAILING**

I, Leland P. Schermer, hereby certify that three (3) originals of this correspondence and the appropriate fee are being deposited with the United States postal service as first class mail in a prepaid envelope addressed to: Mail Stop: Appeal Brief – Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Nov. 30, 2004 *Leland P. Schermer*  
Date Signature

12/06/2004 HAL11 00000007 09727109 340.00 0P  
01 FC:1402

## **II. Related Appeals and Interferences:**

No issues are currently under appeal or subject to interference proceedings in any related applications or patents.

## **III. Status of Claims:**

Claims 14 and 16 – 17 are the subject of this appeal and stand rejected.

## **IV. Status of the Amendments:**

Amendments to the claims were filed on July 30, 2004 after the final rejection of the claims on appeal. These amendments were denied entry by the Primary Examiner.

The *Claims Appendix* (section IX) contains current claims 14 and 16 – 17.

## **V. Summary of Invention:**

The appealed claims are directed to motion furniture having an adjusting device for movement of a footrest. More specifically, a chair 29 with a moving footrest 28, one type of motion furniture, is shown in FIGS. 10-12 of the application, and is generally described in paragraphs 41 – 43 of the specification.<sup>1</sup> Motion furniture 29 comprises an adjusting device 10 that includes a rotary drive mechanism 11 that rotates a crossbar 14. Crossbar 14, in turn, is connected to footrest 28. Activation of the adjusting device 10 causes the footrest to move between the retracted and extended positions. See FIGS. 10 and 12, respectively. Pantographic style linkage 31 operates between the crossbar 14 and the footrest 28 to facilitate such movement.

---

<sup>1</sup> Other claims, directed to the embodiments disclosed in FIGS. 1-9, have been cancelled without prejudice in prior amendments. Thus, the embodiments of the invention shown in FIGS. 10-12 are the subject of the three claims on appeal.

The rotary drive mechanism 11 is securely mounted to the stationary supporting structure of the motion furniture 29. Crossbar 14 is rotated by the output member of the rotary drive mechanism 11. Rotation of crossbar 14 not only causes footrest 28 to extend away from the stationary supporting structure, but pantographic style linkage 31 facilitates such movement. Pantographic style linkage 31, or a lazy tong as it is sometimes called, also forces footrest 28 to gradually shift orientation from being generally perpendicular to the seating surface (when retracted) to being generally parallel to the seating surface (when extended fully). This change in orientation and extension of the footrest is accomplished by the operational relationship between the rest of the adjusting device and the pantographic linkage, as well as by the collapsing and expanding nature of the pantographic style linkage itself.

As described in the specification, these elements permit pantographic linkage system 31 to facilitate movement of footrest 28. Pantographic linkage system 31 performs the function of implementing articulated movement of footrest 28 between the generally vertical or stowed position and the generally horizontal or fully extended position. See paragraph 41 of the specification and FIGS. 10 and 12.

## **VI. Issues on Appeal:**

Claims 14 and 16 – 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,568,661 to Bathrick et al. (hereafter “Bathrick”) in view of U.S. Patent No. 5,072,463 to Willis (hereafter “Willis”). The issues on appeals are (1) whether the Examiner failed to make a prima facie case with “clear and particular” evidence of the alleged obviousness of claims 14 and 16 – 17 over Bathrick in view of Willis, when there has been no showing by the Examiner of a motivation to combine these references; (2) whether the claim preamble is part of

the claim; and (3) whether applicants' proof of what a claim limitation means is insufficient if such proof does not also show what the limitation *does not mean*, as required by the Examiner.

## VII. Grouping of Claims:

Each of claims 14, 16 and 17 are separately patentable. The claims do not stand or fall together.

## VIII. Argument:

### A. Claim 14

#### 1. There Is No Suggestion To Combine Bathrick and Willis

This case presents a textbook example of an Examiner improperly combining references when there is no evidence whatsoever of any motivation to make that combination. The Examiner has not cited any such evidence, despite the legal requirement that he do so, because there is none for him to cite. In fact, the cited references themselves provide compelling evidence that the references actually teach away from making the combination.

The Examiner's final rejection that combined a primary reference, Bathrick, a reference acknowledged by the Examiner to be missing the pantographic style linkage element of independent claim 14 at issue on appeal, with a secondary reference, Willis, which allegedly contains an analog to the missing element of Bathrick, is lacking entirely the "glue" that is necessary to hold that argument together (i.e., to make the combination) - - the suggestion to combine these references with each other.

"To reject claims in an application under section 103, an Examiner must show an un rebutted *prima facie* case of obviousness." *In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir.

1998). See *In re Deuel*, 51 F.3d 1552, 1557 (Fed. Cir. 1995). It is well settled that the Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art. *In re Fritch*, 972 F.2d 1260, 1265 (Fed. Cir. 1992) (citing *In re Piasecki*, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787-88 (Fed. Cir. 1984)). "[The Examiner] can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references." *Id.* quoting *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Furthermore, the factual inquiry of whether to combine references "must be based on objective evidence of record." *In re Lee*, 277 F.3d 1338, 1343 (Fed. Cir. 2002).

The U.S. Court of Appeals for the Federal Circuit ("Federal Circuit") has made it clear that it is improper for an Examiner to find individual elements of a claim in prior art references, and then "combine" the references by simply declaring that it would have been obvious to make the combination. The Federal Circuit has termed this practice to be an improper entry into the "tempting but forbidden zone of hindsight" when analyzing the patentability of claims pursuant to 35 U.S.C. § 103.

The Federal Circuit addressed the requirement of evidence of a suggestion to combine, and the concomitant duty to avoid using hindsight analysis, in *In re Rouffet*, 149 F.3d 1350, 1357-58 (Fed. Cir. 1998).

As this court has stated, "virtually all [inventions] are combinations of old elements." *Environmental Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 698, 218 U.S.P.Q. (BNA) 865, 870 (Fed. Cir. 1983); see also *Richdel, Inc. v. Sunspool Corp.*, 714 F.2d 1573, 1579-80, 219 U.S.P.Q. (BNA) 8, 12 (Fed. Cir. 1983) ("Most, if not all, inventions are combinations and mostly of old elements."). Therefore an examiner may often find every element of a claimed invention in the prior art. If identification of each claimed element in the prior art were sufficient to negate patentability, very few patents would ever issue. Furthermore, rejecting patents solely by finding prior art

corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be "an illogical and inappropriate process by which to determine patentability." *Sensonics, Inc. v. Aerosonic Corp.*, 81 F.3d 1566, 1570, 38 U.S.P.Q.2D (BNA) 1551, 1554 (Fed. Cir. 1996).

To prevent the use of hindsight based on the invention to defeat patentability of the invention, **this court requires the examiner to show a motivation to combine the references that create the case of obviousness.** In other words, the examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed.

The court continued:

... To counter this potential weakness in the obviousness construct, the suggestion to combine requirement stands as a critical safeguard against hindsight analysis and rote application of the legal test for obviousness.

Because the Board did not explain the specific understanding or principle within the knowledge of a skilled artisan that would motivate one with no knowledge of Rouffet's invention to make the combination, this court infers that the examiner selected these references with the assistance of hindsight. This court forbids the use of hindsight in the selection of references that comprise the case of obviousness. See *In re Gorman*, 933 F.2d 982, 986, 18 U.S.P.Q.2D (BNA) 1885, 1888 (Fed. Cir. 1991). Lacking a motivation to combine references, the Board did not show a proper prima facie case of obviousness. This court reverses the rejection over the combination of King, Rosen, and Ruddy.

*Rouffet*, 149 F.3d at 1357-58. (Emphasis added).

The Federal Circuit has held that "[o]ur case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references." *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999). Of critical importance to the

Federal Circuit is that the Examiner must cite to independent *evidence* in support of an effort to combine references, and this evidence “must be clear and particular.” *In re Dembiczak*, 175 F.3d at 999. “Broad conclusory statements regarding the teaching of multiple references, standing alone, are not ‘evidence.’” *Id.*

In *Dembiczak*, the Federal Circuit stated the following:

All of the obviousness rejections affirmed by the Board resulted from a combination of prior art references . . . . To justify this combination, the Board simply stated that “the Holiday and Shapiro references would have suggested the application of . . . facial indicia to the prior art plastic trash bags.” However, *rather than pointing to specific information in Holiday or Shapiro that suggests the combination with the conventional bags*, the Board instead described in detail the similarities between the Holiday and the Shapiro references and the claimed invention, noting that one reference or the other – in combination with each other and the conventional trash bags – described all of the limitations of the pending claims. Nowhere does the Board *particularly* identify any suggestion, teaching, or motivation to combine the children’s art references (Holiday and Shapiro) with the conventional trash or lawn bag references . . . .

*In re Dembiczak*, 175 F.3d at 1000; emphasis added.

The Court went on to say that not only is “*evidence of a suggestion, teaching or motivation to combine*” required, but such evidence typically comes from the prior art references themselves (“the suggestion more often comes from the teachings of the pertinent references.”) (citing *In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir. 1998)). *Dembiczak, supra*.

In rejecting the Examiner’s and Board’s approaches in *Dembiczak*, the Federal Circuit stated:

To the contrary, the obviousness analysis in the Board’s decision is limited to a discussion of the ways that the multiple prior art references can be combined to read on the claimed invention. For example, the Board finds that the Holiday bag reference depicts a “premanufactured orange” bag material, see *Dembiczak*, slip op. at 21, finds that Shapiro teaches the use of paper bags in various sizes,

including “large”, see *id.* at 22-23, and concludes that the substitution of orange plastic for the crepe paper of Holiday and the paper bags of Shapiro would be an obvious design choice, see *id.* at 24. Yet this reference-by-reference, limitation-by-limitation analysis fails to demonstrate how the Holiday and Shapiro references teach or suggest their combination with the conventional trash or lawn bags to yield the claimed invention.... Because we do not discern any finding by the Board that there was a suggestion, teaching or motivation to combine the prior art references cited against the pending claims, the Board’s conclusion of obviousness, as a matter of law, cannot stand.

*Id.* at 1000.

Similarly, in *In re Lee*, 277 F.3d 1338, 1341 (Fed. Cir. 2002), the Federal Circuit vacated a decision by the Board and the Examiner that found the various elements recited in the claims were collectively disclosed in several prior art references when combined. The applicant appealed, arguing that the prior art failed to provide a teaching or motivation to combine the prior art references. The Board originally concluded that it was not necessary to present a source of a teaching or motivation to combine the references. The Board stated:

The conclusion of obviousness may be made from common knowledge and common sense of a person of ordinary skill in the art without any specific hint or suggestion in a particular reference.

*In re Lee*, 277 F.3d at 1341. The Federal Circuit, in overruling the Board, stated:

“The factual inquiry whether to combine references must be thorough and searching.” [*McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52 (Fed. Cir. 2001).] It must be based on objective evidence of record. This precedent has been reinforced in myriad decisions, and cannot be dispensed with. See, e.g., *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1124-25, 56 U.S.P.Q.2D (BNA) 1456, 1459 (Fed. Cir. 2000) (“a showing of a suggestion, teaching, or motivation to combine the prior art references is an ‘essential component of an obviousness holding’”) (quoting *C.R. Bard, Inc. v. M3 Systems, Inc.*, 157 F.3d 1340, 1352, 48 U.S.P.Q.2D (BNA) 1225, 1232 (Fed. Cir. 1998)); *In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q.2D (BNA) 1614, 1617 (Fed. Cir. 1999) (“Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or



motivation to combine prior art references."); *In re Dance*, 160 F.3d 1339, 1343, 48 U.S.P.Q.2D (BNA) 1635, 1637 (Fed. Cir. 1998) (there must be some motivation, suggestion, or teaching of the desirability of making the specific combination that was made by the applicant); *In re Fine*, 837 F.2d 1071, 1075, 5 U.S.P.Q.2D (BNA) 1596, 1600 (Fed. Cir. 1988) ("teachings of references can be combined only if there is some suggestion or incentive to do so.") (emphasis in original) (quoting *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1577, 221 U.S.P.Q. (BNA) 929, 933 (Fed. Cir. 1984)).

**The need for specificity pervades this authority.** See, e.g., *In re Kotzab*, 217 F.3d 1365, 1371, 55 U.S.P.Q.2D (BNA) 1313, 1317 (Fed. Cir. 2000) ("particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed"); *In re Rouffet*, 149 F.3d 1350, 1359, 47 U.S.P.Q.2D (BNA) 1453, 1459 (Fed. Cir. 1998) ("even when the level of skill in the art is high, the Board must identify specifically the principle, known to one of ordinary skill, that suggests the claimed combination. In other words, the Board must explain the reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious."); *In re Fritch*, 972 F.2d 1260, 1265, 23 U.S.P.Q.2D (BNA) 1780, 1783 (Fed. Cir. 1992) (the examiner can satisfy the burden of showing obviousness of the combination "only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references").

With respect to Lee's application, neither the examiner nor the Board adequately supported the selection and combination of the Nortrup and Thunderchopper references to render obvious that which Lee described. The examiner's conclusory statements that "the demonstration mode is just a programmable feature which can be used in many different devices for providing automatic introduction by adding the proper programming software" and that "another motivation would be that the automatic demonstration mode is user friendly and it functions as a tutorial" do not adequately address the issue of motivation to combine. This factual question of motivation is material to patentability, and could not be resolved on subjective belief and unknown authority. It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher." *W.L. Gore v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 U.S.P.Q. (BNA) 303, 312-13 (Fed. Cir. 1983). Thus the Board must not only assure that the requisite findings are made, based on

evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion.

*In re Lee*, 277 F.3d 1338, 1343-44 (Fed. Cir. 2002) (Emphasis added).

In a similar case, the Federal Circuit cited to *In re Lee* to require that references be used to support the Board's general conclusions. *In re Thrift*, 298 F.3d 1357 (Fed. Cir. 2002). The *Thrift* court stated that in *In re Lee* "we held that the Board's reliance on 'common knowledge and common sense' did not fulfill the agency's obligation to cite references to support its conclusions. *Id.* at 1344, 61 U.S.P.Q.2d (BNA) at 1434. Instead, the Board must document its reasoning on the record to allow accountability. *Id.* at 1345, 61 U.S.P.Q.2d (BNA) at 1435. This documentation also allows for judicial review. *Id.*" *In re Thrift*, 298 F.3d at 1364.

## 2. The Examiner's Failure To Meet His Burden On A Suggestion To Combine Is Clear

In his Office Action dated April 28, 2004, the Examiner stated:

Bathrick et al. does not disclose a pantographic style linkage to facilitate movement of said footrest. However, Willis teaches in figures 7-9 a piece of motion furniture comprising, *inter alia*, a pantographic linkage 84 to facilitate movement of a footrest 14. **Therefore**, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Bathrick et al. in view of the teaching of Willis to facilitate movement of said footrest with a pantographic linkage so as to facilitate said footrest to adjust from an elevated horizontal position to a retracted vertical position thus providing additional footrest positioning increasing the versatility of said piece of furniture, especially for providing easy access and exit from said furniture for a user. (Emphasis added).

The Examiner's proposed modification of Bathrick to include a part of Willis fails for numerous reasons. First, the Examiner's broad conclusion that "[t]herefore, it would have been obvious..." can only be characterized as hindsight. The Examiner has used the mere existence of pantographic means 84 in Willis as being sufficient in itself to justify the combination. In doing

so, the Examiner failed to point to any evidence of a specific teaching in either reference or elsewhere suggesting that one skilled in the art would have looked to Willis to add the pantographic means to the invention of Bathrick. Second, nowhere does the Examiner explain how one could “modify the apparatus of Bathrick” with a pantographic style linkage – it appears physically impossible to do.

The Examiner failed to provide any objective evidence for this combination, as is required of him. Furthermore, it is not clear that the combination is desirable, physically possible or even adds functionality with respect to these references. Because the Examiner did not provide any evidence of a suggestion or teaching to combine, it is difficult to refute the suggested combination on technical grounds. However, a detailed reading of the two prior art references shows that such a combination is impractical if not impossible. Moreover, the two references “teach away” from a combination.

### 3. Bathrick and Willis Teach Away From A Combination

Bathrick et al. discloses that articulated beds had previously been marketed as a hospital or nursing home product. (Bathrick; col. 1, lines 6-12). Previous beds were ‘over designed and over complicated’ and as a result too expensive for the home market. *Id.* Bathrick noted that articulated chairs and sofas have achieved some commercial success in the residential market, but only as the designs have adapted for the residential market. *Id.* at lines 13-16.<sup>2</sup> Most notably, according to Bathrick, articulated beds were too heavy and bulky for shipment. *Id.* at lines 17-22.

---

<sup>2</sup> As discussed hereafter, the preamble of claims 14, 16 and 17 all refer to “motion furniture,” a term that includes articulated chairs and sofas, but not beds. Bathrick itself recognizes that articulated beds are a different product from articulated chairs and sofas.

Bathrick cites Elliot (U.S. Pat. No. 4,381,571) as a failed attempt to penetrate the residential articulated bed market. *Id.* at col. 1, lines 23-35. Bathrick says the following about Elliott:

The Elliott mattress frame includes large stationary “L” shaped side sections with cross members to provide support for *axially oriented motor and screw assemblies that drive complicated four bar linkages at the four corners of the module* that serve to raise and lower the head and leg sections of the mattress support. While Elliott suggests that these parts, numbering literally hundreds, may be disassembled for shipment it is realistically not practical to have the purchaser reassemble this complex device in his or her home.

*Id.* (Emphasis added).

Bathrick, as noted above, specifically points to Elliott’s use of “complicated four bar linkages” at the four corners of the power module that serve to “raise and lower” the head and leg sections of the mattress support. Elliott describes these linkages as structural parallelograms. See U.S. Patent No. 4,381,571, the Elliott reference, items 74, 76, 56, and 68 of FIG. 2, and items 74, 76, 104, and 105 of FIG. 3, discussed generally in column 2, lines 32 to 59; column 3, lines 3 to 15; column 4, line 50 to column 5, line 18; and column 5, line 31 to column 6, line 20 of Elliott. In other words, Bathrick is specifically distinguishing his disclosure and invention as teaching away from a prior art reference that teaches “pantographic style linkage” structures used to facilitate movement of what the Examiner considers the analog to a footrest because these “complicated four bar linkages at the four corners of the module” are “realistically not practical to have the purchaser reassemble this complex device in his or her home.” Nor would it be realistically practical for Willis’ pantograph means to be assembled and attached at home by the purchaser to Bathrick’s design.

Bathrick, in contrast to Elliott, discloses a simple and easily assembled, disassembled and shipped device. This is a consistent and important theme in Bathrick. Bathrick states that the

advantage of the invention of the cited patent reference over his own previous patented design (U.S. Patent No. 5,063,623 or “Bathrick I”) is that the entire bed assembly can be packaged for shipment in three compact packages, one including the power module, one including the collapsed modified bed frame, and the final one containing the collapsed mattress support. (Bathrick; col. 1, line 58 to col. 2, line 8; col. 3, lines 10-20). A review of Bathrick I shows that, previously, the power module was physically secured to the articulating bed (see Bathrick I; col. 3, line 61 to col. 4, line 2), but the advance found in the cited Bathrick reference includes the fact that the cited reference no longer connects the power module to bed frame 10, but instead uses two easily detached U-shape supports 14 and 15. Moreover, a review of the structure in Willis referenced by the Examiner makes it clear that by applying the pantograph means of Willis to Bathrick, the mattress support could not be collapsed “having a length and width no greater than the collapsed size of the support.” (Bathrick; column 5, lines 55-56).

Bathrick is intended to overcome another limitation of previous articulated bed designs, by making the power mechanism modular. The power mechanism is modular in Bathrick for two primary reasons. First, the power module is not secured to bed frame 10, but instead is attached to a pair of detachable “U” shaped cross members 14 and 15, which are themselves easily attached to and removed from side rails 20 and 21. See FIGS. 2 and 3, and col. 3, line 49 to col. 4, line 27 of Bathrick.

The second way that the power mechanism is made modular is by assuring that its rocker shafts 50 and 51 (see FIGS. 4 and 2) are not secured in any manner to the articulated bed. Bathrick explains this latter concept: “An important aspect of the present invention is the housing for the drive module provides the sole pivotal support for these two rocker shafts. As noted above these rocker shafts have previously been journalled inside frame members that

require the drive module and the side frame members to be shipped as a unit from the manufacturing location to assembly location or from assembly to ultimate purchaser, because frequently the receiving party cannot technically provide the proper assembly. With the present module final set up is reduced and the power module can be shipped in a much smaller container in its completely assembled form.” (Bathrick; column 2, lines 46-57).

This teaching is in direct contrast to the pantograph means disclosed in Willis. The Willis patent states: “It will also be noted that there is a pantograph arrangement 84 connecting segments 14 and 18. Arrangement 84 comprises a pair of rods 86 on opposite side of segment 18 as also seen in FIG. 12, joined to a pair of rods 88 pivoted at one end on segment 14 and the other end on one end of each of rods 86. Shaft 45 passes through rods 86 and as previously indicated *is supported on each end by sideboards 22 and 24.*” (Willis; column 3, lines 35-42) (Emphasis added).

Similarly, Bathrick discloses a rocker arm and rocker shaft assembly that can be collapsed, further allowing for the pervasive goal of ease of shipment. (Bathrick; column 5, lines 19-35 and lines 50-54). Claim 3 of Bathrick is directed to a power module, “...including means for collapsing the rocker arm toward the housing for packing and shipping without removing the rocker arm from the end of the rocker shaft.” This design tries to maintain a simple design by not requiring removal of the rocker arms, yet maintaining collapsibility for ease of shipment. This again is in direct contrast to Willis. Rod 78, which is connected to arm 76 of panel 16 in Willis, does not appear to be easily collapsed for shipment, yet is required for operation of the pantograph means.

All of these important differences discussed above show that Willis teaches away from a central objective of Bathrick, and thus a person of ordinary skill in the art would not look to Willis to combine its pantograph with Bathrick.

The Federal Circuit, in *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339 (Fed. Cir. 2001), has stated that when prior art references can be shown to teach away from a combination, the claimed invention is likely to be non-obvious. The Federal Circuit held:

Perhaps *McGinley*'s best argument to save his claims from prima facie obviousness in the light of *Pratt* and *Morgan* is his contention that those references together teach away from their combination. We have noted elsewhere, as a "useful general rule," that references that teach away cannot serve to create a prima facie case of obviousness. *In re Gurley*, 27 F.3d 551, 553, 31 U.S.P.Q.2d (BNA) 1130, 1132 (Fed. Cir. 1994). If references taken in combination would produce a 'seemingly inoperative device,' we have held that such references teach away from the combination and thus cannot serve as predicates for a prima facie case of obviousness. *In re Spinnoble*, 56 C.C.P.A. 823, 405 F.2d 578, 587, 160 U.S.P.Q. (BNA) 237, 244 (CCPA 1969) (references teach away from combination if combination produces seemingly inoperative device); see also, *In re Gordon*, 733 F.2d 900, 902, 221 U.S.P.Q. (BNA) 1125, 1127 (Fed. Cir. 1984) (inoperable modification teaches away).

*McGinley*, 262 F.3d at 1353-54.

The meaning of the concept of "teaching away" was also explained in the case of *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994). According to the Federal Circuit, "a reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant. The degree of teaching away will of course depend upon the particular facts; in general, a reference will teach away if it suggests that the line of development flowing from the reference's disclosure is unlikely to be productive of the results sought by the applicant." *In re Gurley*, 27 F.3d at 553.

The pantographic style linkage in the present invention performs a different function than the pantograph in the Willis patent. Willis uses the pantograph means simply to connect the movement of the footrest portion to that of the intermediate unit. To move the footrest by itself, the Willis patent would appear to require another drive mechanism. However, the pantographic style linkage in the present application serves to extend the footrest portion and it can do so independent of any movement of the seat of the motion furniture. The pantographic style linkage system of the present invention accomplishes the extension and retraction of the footrest because (a) when closing, the links collapse into a densely packed relationship; and (b) when opening or extending, the relatively limited rotation of crossbar 14 initiates a comparatively substantial extension of the pantographic style linkage. In Willis, no such action is disclosed or even possible. The pantograph means in Willis keeps the back support of the articulating bed and the foot support parallel to each other at all times. More specifically, the pantographic style linkage of the present invention allows the footrest to extend from a stowed generally vertical position to a generally horizontal fully extended position, as well as positions in between, even if the seat of the motion furniture never moves. Willis is not capable of this function.

Furthermore, it appears impossible for the combination envisioned by the Examiner to accomplish this function.<sup>3</sup> If a pantographic linkage were applied to Bathrick, the footrest could

---

<sup>3</sup> To some extent, applicants are left to guess at the “combination envisioned by the Examiner” as it is not provided in the Office Action of April 30, 2004. For example, it is very unclear whether the Examiner contemplates merely adding the pantograph means of Willis to the rest of the structure shown in Bathrick, or whether the Examiner contemplates substituting Willis’ pantograph means for some structure already part of Bathrick. If added, where does it go? If substituted, what structure comes out of Bathrick? These basic questions are not answered by the Examiner. With respect to the portion of Bathrick that the Examiner considers a footrest, that structure already moves, via different means that has no expansion/retraction capability. There is no reason why a person skilled in the art would be looking to replace the structure shown in Bathrick when it already serves its function. The so-called “footrest” panel of Bathrick cannot



not move in the fashion called for by the Examiner: “thus providing additional footrest positioning increasing the versatility of said piece of furniture....” Cross members 26 and 30 would have to be removed from Bathrick to allow the footrest to attain a retracted vertical position. Bathrick does not suggest the possibility or desirability of removing these components, as these members are necessary to hold the bed frame together.

In addition, the entire configuration of the articulated bed of Bathrick would have to be redesigned because the mattress support rests on side rails 20 and 21. These two components would have to be moved outward to allow the footrest to pass between them, for the Examiner’s suggested combination of Bathrick and Willis to work. If these pieces were moved outward, the mattress support assembly 18 would no longer be supported by side rails 20 and 21. It is a critical function of the design of Bathrick that the mattress support fixed central panel 42 be supported by horizontal leg portions 23 of the angle iron side rails 20 and 21, thus preventing the footrest from moving below this plane. (See Bathrick; col. 3, lines 65-67 and col. 4, lines 1-27; see also FIGS. 2 and 3).

Bathrick teaches a collapsible unit. “The head rail portions 25 and 28 and the foot rail portions 26 and 30 can be pivoted to positions coaxially with the side rails 20 and 21 for packing and shipment.” (Bathrick; col. 4, lines 6-8). Adding the pantograph means of Willis would frustrate this purpose since Willis discloses “a pantograph arrangement 84 connecting segments 14 and 18. Arrangement 84 comprises a pair of rods 86 on opposite sides of segment 18 as also seen in FIG. 12, joined to a pair of rods 88 pivoted at one end on segment 14 and the other end on one end of each of rods 86. Shaft 45 passes through rods 86 and as previously indicated is supported on each end by sideboards 22 and 24.” (Willis; col. 3, lines 35-42). Shaft 45, as

---

operate with the pantographic style linkage since that panel is already connected by a hinge to adjacent panel 86 (see FIG. 1).

supported by sideboards 22 and 24, would prevent the frame of Bathrick from being collapsed for shipment. While the components of Willis may be disassembled for shipment, it is not practical to have the purchaser reassemble this complex linkage system in their home, just as with the Elliott reference. Such a reading would discourage one having ordinary skill in the art from combining the pantograph means of Willis with the articulated bed disclosed in Bathrick.

Furthermore, in neither Bathrick nor Willis can the footrest portion move independently of the main piece of furniture. In Willis, the pantograph means is provided “for rotating said foot segment with respect to said intermediate segment in response to rotation of said intermediate segment by said first power means.” (U.S. Pat. No. 5,072,463; Claim 1) The footrest segment cannot be adjusted without corresponding movement of the intermediate (or seating) portion of the articulated bed. Likewise, the footrest portion of Bathrick moves in response to movement of the intermediate panel, which moves from an upward force imposed by the nylon rollers attached at the end of the rocker arm of the power module. In neither reference can the adjusting device initiate movement of the footrest alone.

#### 4. Neither Reference Discloses Motion Furniture

Motion furniture is a term of art well understood in the home furnishings industry as including chairs or other seating furniture with moveable parts (including for example rockers, recliners and even stationary chairs with, for example, a moveable backrest or footrest). Motion furniture also includes love seats, sofas, couches and the like that have a part that moves, as the design of these items are fundamentally like chairs only with a wider distance between armrests for the seats and back supports. Many manufacturers in the home furnishings industry put

reclining backrests and extending footrests on items such as love seats, couches and the like. This is all well known to those skilled in the art.

Motion furniture, as used in claims 14, 16 and 17, does not embrace beds however. Importantly, applicants have submitted prior art patents as evidence to support this interpretation of the term motion furniture. The Examiner, in contrast, has offered no evidence in rebuttal but instead has argued, in effect, that applicants have not proved a negative through the evidence they have submitted. It is the Examiner's position that applicants' evidence, while supporting applicants' position that "chairs and other such furniture is commonly referred to as 'motion furniture' ", see Office Action of April 30, 2004 at page 3, such evidence submitted by applicants does not simultaneously state expressly that motion furniture does not include beds. It also appears that the Examiner believes that "motion furniture" is not a part of the claim in any event because it is not found in the body of the claim but instead is only found in the preamble. Applicants respectfully submit that the Examiner is in error on both of these points.

There is no disagreement that term "motion furniture" appears in the preamble of claims 14, 16 and 17. However, terms in a preamble can constitute part of the claim for patentability purposes when the preamble "gives meaning to the claim." *Corning Glass Works v. Sumitomo Electric U.S.A., Inc.*, 868 F.2d 1251, 1257 (Fed. Cir. 1989). In *Corning Glass Works*, the Federal Circuit dealt with claims that began with the following preamble: "An optical wave guide comprising . . ." The Federal Circuit looked to the specification of the patent at issue in *Corning Glass Works*, and concluded that the preamble gave "life and meaning" to the claim and that the use of that preamble language meant that the invention was not directed to the general category of "optical fibers" but instead was restricted to those optical fibers that work as "wave guides." The Federal Circuit drew a distinction between preamble language that gives life and meaning to

the claim, on one hand (and therefore is considered part of the claim), and those preambles that “merely state a purpose or intended use of the claimed structure” (which are not considered part of the claim). *Id.*

Here, applicants have made it clear through the prosecution history that claims 14, 16 and 17 are directed to the embodiments of this invention found in FIGS. 10 through 12. Applicants also submitted independent prior art showing that the home furnishings trade considers “motion furniture” to comprise chairs (recliners, rockers and stationary types with an extending footrest and/or back rest), love seats, sofas and couches. The Examiner’s objection to this *evidence* is that the evidence proffered by applicants does not also state expressly that beds *are not commonly referred to as motion furniture*:

The [prior art] references [submitted by applicants] merely state that chairs and other such furniture is commonly referred to as “motion furniture.” That evidence, however, does not clearly establish the fact that beds are not also commonly referred to as “motion furniture.” The evidence provided merely establishes that chairs are motion furniture but does not establish that beds are not. See generally *In re Payne et al.* 203 U.S.P.Q. 245.

Office Action of April 30, 2004, p. 3.

The Examiner’s citation to *In re Payne* is inapposite. *In re Payne* is a chemical case and does not stand for the proposition set forth by the Examiner. In *In re Payne*, the applicant sought to rebut the Examiner’s finding of obviousness by arguing that certain limited test results showed an unexpected improvement in the claimed invention over the prior art references used in the rejection. However, the applicant only tested some of the prior art reference compounds. The court noted:

The data on effectiveness of the compounds of Addor I, Addor III and Nikles against armyworm is inconclusive. The data from Addor I relates only to LD50. Addor III teaches that 100 ppm of his compound is required to achieve an LD40 rating against armyworm,

but provides no indication of the concentration needed to achieve LD50. n13/ On this record, therefore, the Addor III compound may be as effective against armyworm as Payne's "Applicants-5" compound. Nikles teaches that 400 ppm of his compound will achieve an LD100 rating against armyworm. The 400 ppm is not described as a minimum concentration and there is no indication that a lower concentration would not achieve LD100. Absent additional data, no meaningful conclusion is possible respecting the relative effectiveness against armyworm of the Addor I and Nikles compounds.

Payne's reliance on an allegedly unexpected broad spectrum activity of his compounds, as evidencing their nonobviousness, must therefore fail in the absence of comparative broad spectrum tests of Nikles' compounds.

Moreover, unlike Addor I, Nikles suggests that his compound possesses broad spectrum activity. Nikles expressly teaches that his compounds "have a surprising range of biological activity, as is observed \* \* \* in the far-reaching control of pests." Nikles conducted successful tests of his compounds against mite and armyworm. His specification states that his compounds are also effective against "houseflies, aphids, caterpillars and beetles." Thus, a person skilled in the art would expect Nikles, not Addor I, to be more representative of the broad spectrum activity of prior art compounds, and Payne's tests of Addor I are insufficient to permit a conclusion respecting the relative broad spectrum effectiveness of the claimed compounds and those of Nikles.

*In re Payne*, 606 F.2d 303, 317-18, 203 U.S.P.Q. (BNA) 245, 257-258 (CCPA 1979).

The C.C.P.A. held that "[c]ontrary to the board's apparent suggestion, an applicant need not test compounds taught in each and every reference. *In re Holladay*, 584 F.2d 384, 386, 199 USPQ 516, 518 (CCPA 1978). However, where an applicant tests less than all the cited compounds, the test must be sufficient to permit a conclusion respecting the relative

effectiveness of applicant's claimed compounds and the compounds of the closest prior art.”<sup>4</sup> *In re Payne*, 606 F.2d at 316.

The rule from *In re Payne* has no application to the claims at issue on appeal here or the specific question of whether applicants’ proofs on the meaning of the claim term “motion furniture” must not only establish what it covers but must go further and establish what it does not cover. Applicants point out, by way of extreme example only, that “motion furniture” does not embrace swiss cheese either - - but to expect applicants to proffer a reference that says that is not what the law requires. Both Bathrick and Willis disclose beds, not motion furniture as that term is understood by those skilled in the art.

To the extent that the Examiner’s mere argument regarding *In re Payne* suffices in lieu of an evidentiary showing (a matter that applicants do not concede, as they continue to contend the Examiner must make an evidentiary showing), applicants have clearly rebutted the Examiner’s showing with their *evidence in the form of prior art* (evidence which the Examiner admits supports their contention), and the Examiner has not offered any evidence in reply. As a result, the Examiner’s decision constitutes reversible error.

In addition, during prosecution applicants have unambiguously expressly disclaimed any interpretation of “motion furniture” as used in claims 14, 16 and 17 as including beds. This is supported by the fact that these claims are directed to the embodiment of the present invention shown in FIGS 10 through 12, and not the embodiments shown in FIGS 1 through 9. Prosecution disclaimers are recognized when construing claims. See *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1324 (Fed. Cir. 2003), where the Federal Circuit repeated the rule

---

<sup>4</sup> The Examiner’s citation of *In re Payne* in the April 30, 2004 Office Action seems so tangential to applicants that they are not even sure that the quoted portion is what the Examiner is referring to by his general citation of the case without a pinpoint reference.

that prosecution disclaimers can serve to limit claim scope. ("Where the patentee has unequivocally disavowed a certain meaning to obtain his patent, the doctrine of prosecution disclaimer attaches and narrows the ordinary meaning of the claim congruent with the scope of the surrender.").

Nothing about the cases finding this doctrine applicable have required that the disclaimer be by way of introduction of a new claim limitation. In fact, it appears to apply when a patent applicant disclaims during prosecution a particular meaning to an existing limitation. In *Spectrum Int'l v. Sterilite Corp.*, 164 F.3d 1372, 1378-79 (Fed. Cir. 1998), the Federal Circuit strongly supported the availability of prosecution disclaimers, as follows:

In determining the proper meaning of the claims, "we first consider the so-called intrinsic evidence, i.e., the claims, the written description, and, if in evidence, the prosecution history." *Digital Biometrics, Inc. v. Identix, Inc.*, 149 F.3d 1335, 1347, 47 U.S.P.Q.2D (BNA) 1418, 1424 (Fed. Cir. 1998). Moreover, "if upon examination of this intrinsic evidence the meaning of the claim language is sufficiently clear, resort to extrinsic evidence, such as treatises and technical references, as well as expert testimony when appropriate, should not be necessary." *Id.*

Unambiguous intrinsic evidence in turn provides sufficient input to the rules of claim construction, in particular in this case, the rule that explicit statements made by a patent applicant during prosecution to distinguish a claimed invention over prior art may serve to narrow the scope of a claim. See *Southwall Techs. Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1576, 34 U.S.P.Q.2D (BNA) 1673, 1676 (Fed. Cir. 1995) ("The prosecution history limits the interpretation of claim terms so as to exclude any interpretation that was disclaimed during prosecution."); *Standard Oil Co. v. American Cyanamid Co.*, 774 F.2d 448, 452, 227 U.S.P.Q. (BNA) 293, 296 (Fed. Cir. 1985) (stating that the prosecution history, which includes "all express representations made by or on behalf of the applicant to the examiner to induce a patent grant," limits the interpretation of the claims "so as to exclude any interpretation that may have been disclaimed or disavowed during prosecution in order to obtain claim allowance"). n2

n2 Our recourse to language emphasizing the relinquishing of subject matter during prosecution should not be construed to undermine the "clear distinction between following the statements in the prosecution history in defining a claim term, and the doctrine of prosecution

history estoppel, which limits expansion of the protection under the doctrine of equivalents when a claim has been distinguished over relevant prior art." *Southwall*, 54 F.3d at 1578, 34 U.S.P.Q.2D (BNA) at 1679 (citing *Biodex Corp. v. Loredan Biomedical, Inc.*, 946 F.2d 850, 862, 20 U.S.P.Q.2D (BNA) 1252, 1262 (Fed. Cir. 1991)).

That explicit arguments made during prosecution to overcome prior art can lead to narrow claim interpretations makes sense, because "the public has a right to rely on such definitive statements made during prosecution." *Digital Biometrics*, 149 F.3d at 1347, 47 U.S.P.Q.2D (BNA) at 1427 (pointing to "notice [as] an important function of the patent prosecution process, as reflected by the [patent] statute itself"). Indeed, "by distinguishing the claimed invention over the prior art, an applicant is indicating what the claims do not cover." *Ekchian*, 104 F.3d at 1304, 41 U.S.P.Q.2D (BNA) at 1368. Therefore, a patentee, after relinquishing subject matter to distinguish a prior art reference asserted by the PTO during prosecution, "cannot during subsequent litigation escape reliance [by the defendant] upon this unambiguous surrender of subject matter." *Southwall*, 54 F.3d at 1581, 34 U.S.P.Q.2D (BNA) at 1681; *Ekchian*, 104 F.3d at 1304, 41 U.S.P.Q.2D (BNA) at 1368 (citing *Southwall*). Accordingly, "claims may not be construed one way in order to obtain their allowance and in a different way against accused infringers." *Southwall*, 54 F.3d at 1576 (citing *Unique Concepts, Inc. v. Brown*, 939 F.2d 1558, 1562, 19 U.S.P.Q.2D (BNA) 1500, 1504 (Fed. Cir. 1991)); see also *Alpex Computer Corp. v. Nintendo Co. Ltd.*, 102 F.3d 1214, 1221, 40 U.S.P.Q.2D (BNA) 1667, 1672 (Fed. Cir. 1996) ("Therefore, because Alpex admitted during prosecution that its claims do not cover a video display system based on shift registers as in Okuda . . . Alpex's claims cannot now be construed to cover the [accused device], which possesses the same structural and functional traits as Okuda."). This principle applies with equal force to arguments made by a patentee to sustain the patentability of claims during reexamination. See, e.g., *Cole v. Kimberly-Clark Corp.*, 102 F.3d 524, 532, 41 U.S.P.Q.2D (BNA) 1001, 1007 (Fed. Cir. 1996) ("We also believe the district court correctly interpreted the prosecution history to require that the 'perforation means' limitation cannot be construed to include ultrasonic bonded seams. Cole surrendered ultrasonic bonded seams in her requests for reexamination.").

Thus, Applicants respectfully submit that their prior prosecution disclaimer is sufficient for its intended purpose.



B. Claim 16

The Examiner has not offered any prior art or even argument that show the further limitations of this claim or, more specifically, that it would have been obvious in view of something in Bathrick or Willis. Consequently, due to that shortcoming, combined with all of the arguments set forth above in respect of claim 14 (which are incorporated by reference herein), the Examiner's conclusion regarding the alleged obviousness of claim 16 cannot be sustained.

C. Claim 17

The Examiner has not offered any prior art or even argument that show the further limitations of this claim or, more specifically, that it would have been obvious in view of something in Bathrick or Willis. Consequently, due to that shortcoming, combined with all of the arguments set forth above in respect of claim 14 (which are incorporated by reference herein), the Examiner's conclusion regarding the alleged obviousness of claim 17 cannot be sustained.

## **CONCLUSION**

The Examiner failed to make a prima facie case that Bathrick, when combined with Willis, renders obvious the subject matter of claims 14, 16 and 17. As a result, the Examiner's rejection of those claims under 35 U.S.C. § 103(a) should be reversed.

Respectfully submitted,

A handwritten signature in black ink, reading "Leland P. Schermer". The signature is written in a cursive style with a large, stylized initial "L".

Leland P. Schermer, Esquire  
Reg. No. 31,419  
Attorney For Appellants

**IX. Claims Appendix:**

14. Motion furniture comprising:

- (1) a piece of furniture having a movable footrest;
- (2) an adjusting device for initiating movement of said footrest, wherein said adjusting device is (a) secured to a portion of said piece of furniture and (b) comprises an electric rotary drive mechanism;
- (3) a crossbar connected to said rotary drive mechanism and connected to said footrest, wherein said rotary drive mechanism directly rotates said crossbar; and
- (4) pantographic style linkage to facilitate movement of said footrest.

16. Motion furniture of claim 14, wherein said crossbar connection to said rotary drive mechanism comprises a linkage system.

17. Motion furniture of claim 14, wherein said crossbar is connected to said rotary drive mechanism by snug-fit passage of said crossbar through a polygonal bore in an output member of said rotary drive mechanism.